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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/942,098

DATE: 09/18/2001  
 TIME: 10:37:39

Input Set : A:\Ar4802.txt  
 Output Set: N:\CRF3\09182001\I942098.raw

4 <110> APPLICANT: Steward, Lance E.  
 5 Fernandez-Salas, Ester  
 6 Aoki, Kei Roger  
 8 <120> TITLE OF INVENTION: Fret Protease Assays For Clostridial  
 9 Toxins  
 11 <130> FILE REFERENCE: P-AR 4802  
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/942,098  
 C--> 13 <141> CURRENT FILING DATE: 2001-08-28  
 13 <160> NUMBER OF SEQ ID NOS: 96  
 15 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 8  
 19 <212> TYPE: PRT  
 20 <213> ORGANISM: Artificial Sequence  
 22 <220> FEATURE:  
 23 <223> OTHER INFORMATION: synthetic construct  
 27 <400> SEQUENCE: 1  
 28 Glu Ala Asn Gln Arg Ala Thr Lys  
 29 1 5  
 32 <210> SEQ ID NO: 2  
 33 <211> LENGTH: 206  
 34 <212> TYPE: PRT  
 35 <213> ORGANISM: Homo sapiens  
 37 <400> SEQUENCE: 2  
 38 Met Ala Glu Asp Ala Asp Met Arg Asn Glu Leu Glu Glu Met Gln Arg  
 39 1 5 10 15  
 40 Arg Ala Asp Gln Leu Ala Asp Glu Ser Leu Glu Ser Thr Arg Arg Met  
 41 20 25 30  
 42 Leu Gln Leu Val Glu Glu Ser Lys Asp Ala Gly Ile Arg Thr Leu Val  
 43 35 40 45  
 44 Met Leu Asp Glu Gln Gly Glu Gln Leu Glu Arg Ile Glu Glu Gly Met  
 45 50 55 60  
 46 Asp Gln Ile Asn Lys Asp Met Lys Glu Ala Glu Lys Asn Leu Thr Asp  
 47 65 70 75 80  
 48 Leu Gly Lys Phe Cys Gly Leu Cys Val Cys Pro Cys Asn Lys Leu Lys  
 49 85 90 95  
 50 Ser Ser Asp Ala Tyr Lys Lys Ala Trp Gly Asn Asn Gln Asp Gly Val  
 51 100 105 110  
 52 Val Ala Ser Gln Pro Ala Arg Val Val Asp Glu Arg Glu Gln Met Ala  
 53 115 120 125  
 54 Ile Ser Gly Gly Phe Ile Arg Arg Val Thr Asn Asp Ala Arg Glu Asn  
 55 130 135 140  
 56 Glu Met Asp Glu Asn Leu Glu Gln Val Ser Gly Ile Ile Gly Asn Leu  
 57 145 150 155 160  
 58 Arg His Met Ala Leu Asp Met Gly Asn Glu Ile Asp Thr Gln Asn Arg  
 59 165 170 175  
 60 Gln Ile Asp Arg Ile Met Glu Lys Ala Asp Ser Asn Lys Thr Arg Ile

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RAW SEQUENCE LISTING  
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Input Set : A:\Ar4802.txt  
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61 180 185 190  
62 Asp Glu Ala Asn Gln Arg Ala Thr Lys Met Leu Gly Ser Gly  
63 195 200 205  
66 <210> SEQ ID NO: 3  
67 <211> LENGTH: 8  
68 <212> TYPE: PRT  
69 <213> ORGANISM: Artificial Sequence  
71 <220> FEATURE:  
72 <223> OTHER INFORMATION: synthetic construct ✓  
76 <400> SEQUENCE: 3  
77 Gly Ala Ser Gln Phe Glu Thr Ser  
78 1 5  
81 <210> SEQ ID NO: 4  
82 <211> LENGTH: 116  
83 <212> TYPE: PRT  
84 <213> ORGANISM: Homo sapiens  
86 <400> SEQUENCE: 4  
87 Met Ser Ala Thr Ala Ala Thr Ala Pro Pro Ala Ala Pro Ala Gly Glu  
88 1 5 10 15  
89 Gly Gly Pro Pro Ala Pro Pro Pro Asn Leu Thr Ser Asn Arg Arg Leu  
90 20 25 30  
91 Gln Gln Thr Gln Ala Gln Val Asp Glu Val Val Asp Ile Met Arg Val  
92 35 40 45  
93 Asn Val Asp Lys Val Leu Glu Arg Asp Gln Lys Leu Ser Glu Leu Asp  
94 50 55 60  
95 Asp Arg Ala Asp Ala Leu Gln Ala Gly Ala Ser Gln Phe Glu Thr Ser  
96 65 70 75 80  
97 Ala Ala Lys Leu Lys Arg Lys Tyr Trp Trp Lys Asn Leu Lys Met Met  
98 85 90 95  
99 Ile Ile Leu Gly Val Ile Cys Ala Ile Ile Leu Ile Ile Ile Val  
100 100 105 110  
101 Tyr Phe Ser Ser  
102 115  
105 <210> SEQ ID NO: 5  
106 <211> LENGTH: 8  
107 <212> TYPE: PRT  
108 <213> ORGANISM: Artificial Sequence  
110 <220> FEATURE:  
111 <223> OTHER INFORMATION: synthetic construct ✓  
115 <400> SEQUENCE: 5  
116 Asp Thr Lys Lys Ala Val Lys Trp  
117 1 5  
120 <210> SEQ ID NO: 6  
121 <211> LENGTH: 8  
122 <212> TYPE: PRT  
123 <213> ORGANISM: Artificial Sequence  
125 <220> FEATURE:  
126 <223> OTHER INFORMATION: synthetic construct ✓  
130 <400> SEQUENCE: 6

RAW SEQUENCE LISTING  
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Input Set : A:\Ar4802.txt  
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131 Arg Asp Gln Lys Leu Ser Glu Leu  
132 1 5  
135 <210> SEQ ID NO: 7  
136 <211> LENGTH: 206  
137 <212> TYPE: PRT  
138 <213> ORGANISM: Rattus sp.  
140 <400> SEQUENCE: 7  
141 Met Ala Glu Asp Ala Asp Met Arg Asn Glu Leu Glu Glu Met Gln Arg  
142 1 5 10 15  
143 Arg Ala Asp Gln Leu Ala Asp Glu Ser Leu Glu Ser Thr Arg Arg Met  
144 20 25 30  
145 Leu Gln Leu Val Glu Glu Ser Lys Asp Ala Gly Ile Arg Thr Leu Val  
146 35 40 45  
147 Met Leu Asp Glu Gln Gly Glu Gln Leu Glu Arg Ile Glu Glu Gly Met  
148 50 55 60  
149 Asp Gln Ile Asn Lys Asp Met Lys Glu Ala Glu Lys Asn Leu Thr Asp  
150 65 70 75 80  
151 Leu Gly Lys Phe Cys Gly Leu Cys Val Cys Pro Cys Asn Lys Leu Lys  
152 85 90 95  
153 Ser Ser Asp Ala Tyr Lys Lys Ala Trp Gly Asn Asn Gln Asp Gly Val  
154 100 105 110  
155 Val Ala Ser Gln Pro Ala Arg Val Val Asp Glu Arg Glu Gln Met Ala  
156 115 120 125  
157 Ile Ser Gly Gly Phe Ile Arg Arg Val Thr Asn Asp Ala Arg Glu Asn  
158 130 135 140  
159 Glu Met Asp Glu Asn Leu Glu Gln Val Ser Gly Ile Ile Gly Asn Leu  
160 145 150 155 160  
161 Arg His Met Ala Leu Asp Met Gly Asn Glu Ile Asp Thr Gln Asn Arg  
162 165 170 175  
163 Gln Ile Asp Arg Ile Met Glu Lys Ala Asp Ser Asn Lys Thr Arg Ile  
164 180 185 190  
165 Asp Glu Ala Asn Gln Arg Ala Thr Lys Met Leu Gly Ser Gly  
166 195 200 205  
169 <210> SEQ ID NO: 8  
170 <211> LENGTH: 8  
171 <212> TYPE: PRT  
172 <213> ORGANISM: Artificial Sequence  
174 <220> FEATURE:  
175 <223> OTHER INFORMATION: synthetic construct  
179 <400> SEQUENCE: 8  
180 Gln Ile Asp Arg Ile Met Glu Lys  
181 1 5  
184 <210> SEQ ID NO: 9  
185 <211> LENGTH: 8  
186 <212> TYPE: PRT  
187 <213> ORGANISM: Artificial Sequence  
189 <220> FEATURE:  
190 <223> OTHER INFORMATION: synthetic construct  
194 <400> SEQUENCE: 9

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/942,098

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Input Set : A:\Ar4802.txt  
Output Set: N:\CRF3\09182001\I942098.raw

195 Glu Arg Asp Gln Lys Leu Ser Glu  
196 1 5  
199 <210> SEQ ID NO: 10  
200 <211> LENGTH: 8  
201 <212> TYPE: PRT  
202 <213> ORGANISM: Artificial Sequence  
204 <220> FEATURE:  
205 <223> OTHER INFORMATION: synthetic construct  
209 <400> SEQUENCE: 10  
210 Glu Thr Ser Ala Ala Lys Leu Lys  
211 1 5  
214 <210> SEQ ID NO: 11  
215 <211> LENGTH: 8  
216 <212> TYPE: PRT  
217 <213> ORGANISM: Artificial Sequence  
219 <220> FEATURE:  
220 <223> OTHER INFORMATION: synthetic construct  
222 <400> SEQUENCE: 11  
223 Gly Ala Ser Gln Phe Glu Thr Ser  
224 1 5  
227 <210> SEQ ID NO: 12  
228 <211> LENGTH: 206  
229 <212> TYPE: PRT  
230 <213> ORGANISM: Mus musculus  
232 <400> SEQUENCE: 12  
233 Met Ala Glu Asp Ala Asp Met Arg Asn Glu Leu Glu Glu Met Gln Arg  
234 1 5 10 15  
235 Arg Ala Asp Gln Leu Ala Asp Glu Ser Leu Glu Ser Thr Arg Arg Met  
236 20 25 30  
237 Leu Gln Leu Val Glu Glu Ser Lys Asp Ala Gly Ile Arg Thr Leu Val  
238 35 40 45  
239 Met Leu Asp Glu Gln Gly Glu Gln Leu Glu Arg Ile Glu Glu Gly Met  
240 50 55 60  
241 Asp Gln Ile Asn Lys Asp Met Lys Glu Ala Glu Lys Asn Leu Thr Asp  
242 65 70 75 80  
243 Leu Gly Lys Phe Cys Gly Leu Cys Val Cys Pro Cys Asn Lys Leu Lys  
244 85 90 95  
245 Ser Ser Asp Ala Tyr Lys Lys Ala Trp Gly Asn Asn Gln Asp Gly Val  
246 100 105 110  
247 Val Ala Ser Gln Pro Ala Arg Val Val Asp Glu Arg Glu Gln Met Ala  
248 115 120 125  
249 Ile Ser Gly Gly Phe Ile Arg Arg Val Thr Asn Asp Ala Arg Glu Asn  
250 130 135 140  
251 Glu Met Asp Glu Asn Leu Glu Gln Val Ser Gly Ile Ile Gly Asn Leu  
252 145 150 155 160  
253 Arg His Met Ala Leu Asp Met Gly Asn Glu Ile Asp Thr Gln Asn Arg  
254 165 170 175  
255 Gln Ile Asp Arg Ile Met Glu Lys Ala Asp Ser Asn Lys Thr Arg Ile  
256 180 185 190

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Input Set : A:\Ar4802.txt  
Output Set: N:\CRF3\09182001\I942098.raw

257 Asp Glu Ala Asn Gln Arg Ala Thr Lys Met Leu Gly Ser Gly  
258 195 200 205  
261 <210> SEQ ID NO: 13  
262 <211> LENGTH: 212  
263 <212> TYPE: PRT  
264 <213> ORGANISM: Drosophila sp.  
266 <400> SEQUENCE: 13  
267 Met Pro Ala Asp Pro Ser Glu Glu Val Ala Pro Gln Val Pro Lys Thr  
268 1 5 10 15  
269 Glu Leu Glu Glu Leu Gln Ile Asn Ala Gln Gly Val Ala Asp Glu Ser  
270 20 25 30  
271 Leu Glu Ser Thr Arg Arg Met Leu Ala Leu Cys Glu Glu Ser Lys Glu  
272 35 40 45  
273 Ala Gly Ile Arg Thr Leu Val Ala Leu Asp Asp Gln Gly Glu Gln Leu  
274 50 55 60  
275 Asp Arg Ile Glu Glu Gly Met Asp Gln Ile Asn Ala Asp Met Arg Glu  
276 65 70 75 80  
277 Ala Glu Lys Asn Leu Ser Gly Met Glu Lys Cys Cys Gly Ile Cys Val  
278 85 90 95  
279 Leu Pro Cys Asn Lys Ser Gln Ser Phe Lys Glu Asp Asp Gly Thr Trp  
280 100 105 110  
281 Lys Gly Asn Asp Asp Gly Lys Val Val Asn Asn Gln Pro Gln Arg Val  
282 115 120 125  
283 Met Asp Asp Arg Asn Gly Met Met Ala Gln Ala Gly Tyr Ile Gly Arg  
284 130 135 140  
285 Ile Thr Asn Asp Ala Arg Glu Asp Glu Met Glu Glu Asn Met Gly Gln  
286 145 150 155 160  
287 Val Asn Thr Met Ile Gly Asn Leu Arg Asn Met Ala Leu Asp Met Gly  
288 165 170 175  
289 Ser Glu Leu Glu Asn Gln Asn Arg Gln Ile Asp Arg Ile Asn Arg Lys  
290 180 185 190  
291 Gly Glu Ser Asn Glu Ala Arg Ile Ala Val Ala Asn Gln Arg Ala His  
292 195 200 205  
293 Gln Leu Leu Lys  
294 210  
297 <210> SEQ ID NO: 14  
298 <211> LENGTH: 203  
299 <212> TYPE: PRT  
300 <213> ORGANISM: Carassius auratus  
302 <400> SEQUENCE: 14  
303 Met Ala Asp Glu Ala Asp Met Arg Asn Glu Leu Thr Asp Met Gln Ala  
304 1 5 10 15  
305 Arg Ala Asp Gln Leu Gly Asp Glu Ser Leu Glu Ser Thr Arg Arg Met  
306 20 25 30  
307 Leu Gln Leu Val Glu Glu Ser Lys Asp Ala Gly Ile Arg Thr Leu Val  
308 35 40 45  
309 Met Leu Asp Glu Gln Gly Glu Gln Leu Glu Arg Ile Glu Glu Gly Met  
310 50 55 60  
311 Asp Gln Ile Asn Lys Asp Met Lys Glu Ala Glu Lys Asn Leu Thr Asp

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/942,098

DATE: 09/18/2001  
TIME: 10:37:40

Input Set : A:\Ar4802.txt  
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L:13 M:270 C: Current Application Number differs, Replaced Current Application No  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:1005 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45  
L:1054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48  
L:1073 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49  
L:1107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51  
L:1154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54  
L:1576 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85  
L:1578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85  
L:1595 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86  
L:1616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87  
L:1641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88  
L:1643 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88  
L:1668 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89  
L:1670 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89  
L:1695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90  
L:1697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90  
L:1722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91  
L:1747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92  
L:1749 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92  
L:1775 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93  
L:1777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93  
L:1802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94  
L:1827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95  
L:1829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95